

In the Specification:

Please amend and substitute the following paragraph for the paragraph beginning on page 14, line 17 as follows:

In the embodiment ~~Importantly,~~ as illustrated in Figure 3B, the left transverse section segment 68C and the right transverse section segment 68D of each of the auxiliary coils 66 is always positioned to lie in the magnetic fields of the same polarity of the magnet arrays 36. Thus, the currents running through the left transverse section segment 68C and the right transverse section segment 68D of the auxiliary coils 66 produce approximately equal and opposite forces, assuming the magnet fields of the magnets 56 are approximately equal. As a result thereof, the magnetic reaction force generated by the auxiliary conductor array 42 on the motor 10 is always approximately zero.

Please amend and substitute the following paragraph for the paragraph beginning on page 15, line 29 as follows:

Figure 3C is a side view of an eight pole motor drive conductor array 40 and the auxiliary conductor array 42 positioned in front of a position of the first magnet array 50. Importantly, in this design, the left transverse section segment 68C and the right transverse section segment 68D are again positioned to lie in the magnetic fields of the same polarity of the magnet arrays 36. From Equation 2, a motor drive with an even number of poles would not be expected to generate a dipole magnetic field. However, errors in coil windings may leave a weak residual dipole field.

Please amend and substitute the following paragraph for the paragraph beginning on page 21, line 1 as follows:

Additionally, the stray magnetic field for a test motor having a nine (9) pole motor ~~driver~~ drive conductor array was compared with the stray magnetic field for a test motor

having a ten (10) pole motor ~~driver~~ drive conductor array. The results are illustrated in three graphs in Figure 11. More specifically, Figure 11 illustrates that the B_y component is much lower for the motor having the 10-pole motor ~~driver~~ drive conductor array than the motor having the 9 pole motor ~~driver~~ drive conductor array. This is believed to reflect the absence of the unbalanced magnetic dipole in the 9 pole motor ~~driver~~ drive conductor array.

Please amend and substitute the following paragraph for the paragraph beginning on page 21, line 12 as follows:

Figure 13 illustrates the field variation of the B_y component of the stray magnetic field along the Z axis for a motor having a ten (10) pole motor ~~driver~~ drive conductor array. The relatively faster falloff in B_y component for the 10-pole field is consistent with the interpretation that it is predominantly a quadrupole field.